

**INDIANA DEPARTMENT OF TRANSPORTATION  
OFFICE OF MATERIALS MANAGEMENT**

**APPROVED LIST REQUIREMENTS  
ITM No. 806-07P**

**1.0 SCOPE.**

- 1.1.** This test procedure covers the requirements for a product, source or otherwise prescribed subject matter to be added, maintained or removed from a Department's approved list.
- 1.2.** The values stated in either English or acceptable SI metric units are to be regarded separately as standard, as appropriate for a specification with which this ITM is used. Within the text, SI metric units are shown in parenthesis. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other, without combining values in any way.
- 1.3.** This ITM may involve hazardous materials, operations, and equipment. This ITM may not address all of the safety problems associated with the use of the test method. The user of the ITM is responsible for establishing appropriate safety and health practices and determining the applicability of regulatory limitations prior to use.

**2.0 REFERENCES.**

**2.1 ITM Standards**

ITM 804      Sample Material Certification Forms

**3.0 TERMINOLOGY**

- 3.1 Terms and Abbreviations.** Definitions for terms and abbreviations shall be in accordance with the 101, except as follows.
  - 3.1.1. Equipment.** An electrical or mechanical product produced by manufacturer.
  - 3.1.2. Manufacturer.** Company owning a source.
  - 3.1.3. Material.** Matter in a raw resource or manufactured product form which is identified by specifications and used in or during the construction and maintenance of transportation facilities.

**3.1.4. Product.** Material produced by a source having a name unique to the manufacturer.

**3.1.5. Source.** Company having a location that provides a material. Term will include the common industry terms such as plant, mill, factory, fabricator, supplier, distributor, distribution terminal, and coater.

**4.0 SIGNIFICANCE AND USE.** This ITM will explain the requirements for a product, source or otherwise prescribed subject matter of an approved list to be added, maintained and removed from the list.

## **5.0 GENERAL REQUIREMENTS.**

**5.1. QCP.** When the specification for a product, source, or otherwise prescribed subject matter requires a QCP, the QCP shall include as appropriate to the product, source or prescribed subject matter, but not be limited to, the following:

- 5.1.1** Name and location of source or manufacturer,
- 5.1.2** List of material and specification reference for the material that the approval is being requested,
- 5.1.3** Average monthly production of the material by size, type or grade,
- 5.1.4** Name, address and telephone number of responsible contact person,
- 5.1.5** Facility layout or production process of the material,
- 5.1.6** Quality parameters of the material,
- 5.1.7** Raw material sampling and testing frequency,
- 5.1.8** Procedures for conforming materials which provides a positive linkage between the furnished materials and the quality control test data,
- 5.1.9** Procedures for non-conforming materials,
- 5.1.10** Procedures for marking and tracking materials,
- 5.1.11** Procedures for documentation maintenance,
- 5.1.12** Finished material sampling and testing frequency,
- 5.1.13** Procedures for reviewing and updating the QCP,
- 5.1.14** Testing laboratory quality system,
- 5.1.15** Names, titles and qualifications of sampling and testing personnel,
- 5.1.16** Location and telephone number of the laboratory testing office,
- 5.1.17** Laboratory equipment and calibration frequency,
- 5.1.18** Test methods, procedures and laboratory equipment used for each type of material,
- 5.1.19** Sample management describing procedures for samples identification, maintenance of the samples prior to testing, sample retention and disposal of samples,
- 5.1.20** Testing report procedures,
- 5.1.21** Methods used to identify improper test results and procedures followed when testing deficiencies occur,
- 5.1.22** Statistical analysis of test results, and
- 5.1.23** Maintenance of test records.

The QCP shall be signed and dated by the source or manufacturer representative at the time the QCP is submitted for acceptance. The QCP shall be maintained to reflect the current status and revisions shall be provided to the Department in writing.

**5.2. Recognized Laboratory.** Testing may be required which will be performed outside the Department's laboratories. A recognized laboratory shall be the following:

**5.2.1** A state transportation agency testing laboratory,

**5.2.2** A testing laboratory regularly inspected by the CCRL for PCC materials,  
or

**5.2.3** A testing laboratory regularly inspected by the AMRL for materials other than PCC materials.

## **6.0 APPROVED LIST PROCEDURE A.**

**6.1. Approval.** A source, requesting approval for addition to a Department's list, shall provide to the Office of Materials Management the following:

**6.1.1** A current MSDS and summary of results of all specified tests for the previous year's production shall be submitted. No test results shall be more than two years old at the time of submission.

**6.1.2** A QCP, which ensures the Department of a continuous supply of material complying with the requirements, shall be furnished in accordance with 5.1. The QCP shall provide for a 95% or greater statistical assurance that the materials will be in accordance with the specifications, and include type and frequency of sampling and testing.

**6.2. Maintaining Approval.** A summary of test data shall be submitted monthly to the Office of Materials Management to verify the 95% or greater statistical compliance requirement. If the material is not produced by the source in a given month, the monthly submittal shall state:

"No \_\_\_\_\_ was manufactured during \_\_\_\_\_."  
material & type, month/year  
class or grade

Samples of material may be obtained randomly for verification at the source or at the point of incorporation into the work in accordance with 106.02.

The source shall provide written notification of any changes, revisions or updates of the QCP, MSDS, source name or address, contact person or product name to the Office of Materials Management.

**6.3. Removal from Approved List.** A source will be removed from the approved list for the following, but not limited to, reasons:

- 6.3.1** Test failures determined by verification sampling,
- 6.3.2** Monthly test reports not provided,
- 6.3.3** Test reports generated by the source which show non-compliance with the 95% statistical requirement, or
- 6.3.4** Performance of product no longer meets the intended purpose.

## **7.0 APPROVED LIST PROCEDURE B.**

**7.1. Approval.** A source, requesting approval for addition to a Department's list, shall provide to the Office of Materials Management the following:

- 7.1.1** A current MSDS and summary of results of all specified tests for six consecutive month's production shall be submitted. No test results shall be more than one year old at time of submission.
- 7.1.2** A QCP, which ensures the Department of a continuous supply of material complying with the requirements, shall be furnished in accordance with 5.1.
- 7.1.3** A certification shall be provided for the applicable material in accordance with ITM 804.

**7.2. Maintaining Approval.** Test reports shall be generated in accordance with specification requirements for the material and submitted monthly to the Office of Materials Management. The reports shall have summarized test results, shall state the name and location of the test facility, and shall be signed by the testing facility technical manager. If the material is not produced by the source in a given month, the monthly submittal shall state:

"No \_\_\_\_\_ was manufactured during \_\_\_\_\_.  
material & type, month/year  
class, or grade

Samples of material may be obtained randomly for verification at the source or at the point of incorporation into the work in accordance with 106.02.

The source shall provide written notification of any changes, revisions or updates of the QCP, MSDS, source name or address, contact person or product name to the Office of Materials Management.

- 7.3. Removal from Approved List.** Removal from the approved list will be in accordance with 6.3.

## **8.0 APPROVED LIST PROCEDURE C.**

- 8.1. Approval.** A source of a product, requesting approval for addition of the product to a Department's list, shall provide to the Office of Materials Management the following:

- 8.1.1** A sample of the product and, if appropriate, a current MSDS,
- 8.1.2** A certification shall be provided for the applicable material in accordance with ITM 804, and
- 8.1.3** A dated test report.

- 8.2. Maintaining Approval.** Samples of product may be obtained randomly for verification at the source or at the point of incorporation into the work in accordance with 106.02.

The source shall provide written notification of any changes, revisions or updates of the MSDS, source name or address, contact person or product name to the Office of Materials Management.

- 8.3. Removal from Approved List.** A product will be removed from the approved list for the following, but not limited to, reasons:

- 8.3.1** Test failures or product changes without notification as determined by verification sampling, or
- 8.3.2** Performance of product no longer meets intended purpose.

## **9.0 APPROVED LIST PROCEDURE D.**

- 9.1. Approval.** A source of a product, requesting approval for addition of the product to the Department's list shall provide to the Office of Materials Management the following:

- 9.1.1** A certification for the applicable material in accordance with ITM 804,
- 9.1.2** A current MSDS,
- 9.1.3** Infrared analysis, residue by oven drying, and specific gravity, and
- 9.1.4** A dated test report.

- 9.2. Maintaining Approval.** Samples of product may be obtained randomly for verification at the source or at the point of incorporation into the work in accordance with 106.02.

- 9.2.1 For a product in which there has been no change in raw materials, formulation, or procedures and test reports on file are less than 5 years old, the source shall submit an annual certification of compliance with ITM 804, except that no test report is required.
- 9.2.2 For a product in which there has been a change in raw materials, formulation, or procedures, a complete certification in accordance with ITM 804 shall be required.
- 9.2.3 For a product in which the completion date of the test report on file is five years old and there has been no change in raw materials, formulation, or procedures, a complete certification in accordance with ITM 804 having limited test results is required.

**9.3. Removal from Approved List.** A product will be removed from the approved list for the following, but not limited to, reasons:

- 9.3.1 Test failures or product changes without notification as determined by verification sampling, or
- 9.3.2 Performance of product no longer meets intended purpose.

## **10.0 APPROVED LIST PROCEDURE E.**

**10.1. Approval.** A source of a product, requesting approval for addition of the product to a Department's list, shall provide to the Material and Tests Division the following:

- 10.1.1 A sample of the product, installation equipment, installation instructions and, if appropriate, a current MSDS, and
- 10.1.2 Test data indicating ability to meet requirements.

**10.2. Maintaining Approval.** Samples of product may be obtained randomly for verification at the source or at the point of incorporation into the work in accordance with 106.02.

The source shall provide written notification of any changes, revisions or updates of the MSDS, source name or address, contact person or product name to the Office of Materials Management.

**10.3. Removal from Approved List.** A product will be removed from the approved list for the following, but not limited to, reasons:

- 10.3.1 Test failures or product changes without notification as determined by verification sampling, or
- 10.3.2 Performance of product no longer meets intended purpose.

## **11.0 APPROVED LIST PROCEDURE F.**

### **11.1. Approval.**

**11.1.1. Records.** A source of a product, requesting approval for addition of the product to the Department's list shall provide to the Office of Materials Management the following:

- a) A certification for the applicable material in accordance with ITM 804,
- b) A current MSDS,
- c) Infrared analysis, residue by oven drying, and specific gravity, and
- d) A dated test report substantiating compliance with applicable specifications.

**11.1.2. Materials and Labor.** In addition, the source shall provide at no cost to the Department the following:

- a) A material sample to the designated location and at the time as required by the Department, and
- b) The labor, equipment, and incidental materials required to install the product.

**11.2. Maintaining Approval.** Samples of product may be obtained randomly for verification at the source or at the point of incorporation into the work in accordance with 106.02.

The source shall provide written notification of any changes, revisions or updates of the MSDS, source name or address, contact person or product name to the Office of Materials Management.

**11.3. Removal from Approved List.** A product will be removed from the approved list for the following, but not limited to, reasons:

- 11.3.1** Test failures or product changes without notification as determined by verification sampling, or
- 11.3.2** Performance of product no longer meets intended purpose.

## **12.0 APPROVED LIST PROCEDURE G.**

**12.1. Approval.** A source of equipment, requesting approval for addition of the equipment to a Department's list, shall provide the Office of Materials Management with the following:

- 12.1.1 A sample of the equipment, operating instructions and, if appropriate, a current MSDS,
- 12.1.2 A QCP, which ensures the Department with a continuous supply of the equipment that complies with the requirements, shall be furnished in accordance with 5.1,
- 12.1.3 A certification shall be provided for the applicable equipment in accordance with ITM 804,
- 12.1.4 The equipment's specifications, and
- 12.1.5 Information about the equipment's use and application.

**12.2. Maintaining Approval.** The source shall provide written notification of any changes, revisions or updates to the equipment, equipment's product name, MSDS, source's name or address, and contact person to the Office of Materials Management.

In addition, the source shall provide the following:

- 12.2.1 If equipment has no changes in design, model number, operational characteristics or procedures and if the test report on file is less than 5 years old, the source shall submit an annual certification in accordance with ITM 804, except no test report will be required,
- 12.2.2 If equipment has no changes in design, model number, operational characteristics or procedures and if the test report on file is 5 years old or more, the source shall submit a complete certification in accordance with ITM 804, except limited test results will be required, or
- 12.2.3 If equipment has had changes in design, model number, operational characteristics or procedures, the source shall submit a complete certification in accordance with 804.

**12.3. Removal from Approved List.** Equipment will be removed from the approved list for the following, but not limited to, reasons:

- 12.3.1 Operational failures or equipment changes without notification as determined by verification of operational field performance,
- 12.3.2 Test reports generated by the source which do not comply with the specification requirements, or
- 12.3.3 Performance of equipment no longer meets intended purpose or use.

### **13.0 APPROVED LIST PROCEDURE H FOR GLASS BEADS.**

**13.1. Approval.** To have a product added to the Department's list, the source shall provide to the Office of Materials Management the following:



- 13.1.1** Three random samples obtained in accordance with ITM 811 of the production run material and at no cost to the Department,
- 13.1.2** A QCP in accordance with section 5.1 that ensures the Department that the material will be produced to meet specification. The QCP shall provide for a 95% or greater statistical assurance that the materials will be in accordance with the specifications. The QCP shall include the type and frequency of Quality Control sampling and testing to be performed by the supplier,
- 13.1.3** A current MSDS, and
- 13.1.4** A Type A Certification in accordance with 916.02(a) shall be provided for material produced and represented by the random samples.

The random samples will be tested and results compared to those included on the Type A certification. If results compare within testing precisions, the material will be approved to be placed on the next published Department's list.

- 13.2. Maintaining Approval.** Random verification samples may be obtained for testing by the Department from material just prior to placement. The source shall submit an annual request to remain on the list to Office of Materials Management. The source shall provide written notification of any changes, revisions or updates of the QCP or MSDS to the Office of Materials Management.

- 13.3. Removal from Approved List.** The material will be removed from the Departments list if any of the following conditions occur:

- 13.3.1** Verification Tests fail to meet specifications,
- 13.3.2** Test reports generated by the source show non-compliance with the 95% statistical requirement,
- 13.3.3** Product changes without notification, or
- 13.3.4** Performance of product no longer meets intended purpose as determined by field evaluation.

#### **14.0 APPROVED LIST PROCEDURE J FOR RETAINING WALL SYSTEMS**

- 14.1. Approval.** To have a retaining wall system added to the Department's list of approved Retaining Wall Systems, the manufacturer shall provide to the Office of Materials Management the following:

- 14.1.1** Five copies of a Technical Evaluation Report. This is an evaluation of the retaining wall system by the Highway Innovative Technology Evaluation Center (HITEC).

- 14.1.2** Five copies of the shop drawings of the wall facing. These shop drawings shall show all dimensions, reinforcing steel, ground reinforcement attachments and any other information necessary to describe the retaining wall system.
- 14.1.3** Five copies of any brochures, photographs, specifications and other information on the wall system's use, applications, construction methods, etc.
- 14.1.4** A Type A Certification in accordance with 916.02(a) substantiating compliance with applicable specifications.

**14.2 Maintaining Approval.** Materials shall be sampled and tested in accordance with the applicable specifications.

The manufacturer shall provide written notification of any changes, revisions or updates of the wall system to the Office of Materials Management.

**14.3 Removal from Approved List.** Reasons for removal of a product from the approved list shall include, but not be limited to, the following:

- 14.3.1** Test failures or product changes without notification of the Office of Materials Management.
- 14.3.2** Performance of the retaining wall system fails to meet the intended purpose.

## **15.0 APPROVED LIST PROCEDURE K FOR IMPACT ATTENUATOR OR GUARDRAIL END TREATMENTS.**

**15.1 Approval.** A source of a product, requesting approval for addition of the source or product to a Department's list, shall provide to the Office of Materials Management the following:

- 15.1.1** A written acceptance from the FHWA that the product has passed the NCHRP 350 crash test of the test level specified;
- 15.1.2** A completed Department product evaluation form, attached;
- 15.1.3** An itemized price sheet including each part;
- 15.1.4** Information regarding the following:

- a)** Field repair cost data, actual cost preferable, for minor as well as major impacts. All repairs shall be performed in the field.

Field repair costs shall include; crew size, clock hours and man hours (excluding traffic control setup and teardown time) required to repair a unit, and equipment and tools required;

- b) A list of agencies that have purchased or installed the product and a contact person with phone number and email address;
- c) Time required for replacement parts delivery;
- d) Routine maintenance costs for an unimpacted unit;
- e) Specific pay item designations that the product qualifies. For guardrail end treatments, this information is shown in Indiana Design Manual Section 49-5.04(04). For impact attenuators, this information is shown in Indiana Design Manual Section 49-6.01.

**15.1.5** A written commitment to comply with Department certified installers training required by the Standard Specification of the product.

The Department may reject the product for consideration due to maintenance concerns.

The Department will place the product in two select field locations for a one-year evaluation period. The manufacturer shall provide and install two units in accordance with their recommendation at no cost to the Department. The cost of all repairs to the unit, once installed, will be borne by the Department and performed by the Manufacturer. The Department will provide a safety zone for any required repairs during the evaluation period. The field evaluation criteria will consist of initial cost, repair cost, repair time required, ease of maintenance and repairs, and availability of parts, as compared to units already on the approved list.

After the one year evaluation period, the Department will determine whether to place the product on the approved list.

A Manufacturer or product will not be considered for placement on the approved list if the three Manufacturer or products currently on the approved list are deemed to be more cost efficient or competitive.

**15.2 Maintaining Approval.** The Manufacturer shall comply with the specifications in providing training for the purpose of certifying or recertifying product installers and Department maintenance forces. The Manufacturer shall maintain and provide annually a list of its certified installers and Department maintenance forces.

The product shall meet NCHRP 350 crash test requirements and approved by FHWA in the event of any product changes.

The Manufacturer shall provide written notification of any changes to the product, source name or address, contact person or product name to the Office of Materials Management.

**15.3 Removal from Approved List.** A maximum of three Manufacturer or products for each category will appear on the approved list. A Manufacturer or product will be removed from the approved list for the following, but not limited to, reasons:

- 15.3.1** Manufacturer or product changes without notification;
- 15.3.2** Performance of product no longer acceptable;
- 15.3.3** The Manufacturer no longer trains or recertifies the installers;
- 15.3.4** Repair part delivery becomes a problem; or
- 15.3.5** A new product is deemed to be more cost efficient or competitive.

## **16.0 APPROVED LIST PROCEDURE L FOR DETECTABLE WARNING ELEMENTS.**

**16.1 Approval.** To have a detectable warning element added to the Department's list of approved Detectable Warning Elements, the manufacturer shall provide to the Office of Materials Management the following:

- 16.1.1** For brick detectable warning elements, a sample of six elements shall be provided. For other types of detectable warning elements, the sample shall be a single element. A current MSDS shall be provided, if appropriate.
- 16.1.2** A Type B Certification in accordance with 916.02(b) substantiating compliance with applicable specifications shall be provided. The Certification shall also clearly state which types of concrete curb ramps, as specified by the INDOT Standard Drawings, are applicable to the detectable warning element. Limitations as to the radius of concrete curb ramp installations shall be clearly stated.
- 16.1.3** Product literature which describes the detectable warning element to include instructions for installation.

**16.2 Maintaining Approval.** Random verification samples of the elements may be obtained prior to placement for testing or inspection by the Department. The manufacturer shall submit an annual request to remain on the Department list to the Office of Materials Management. A Type B Certification in accordance with 916.02(b) substantiating compliance with applicable specifications shall be provided. The manufacturer shall provide written notification of any changes to the product or source since the detectable warning element was approved.

**16.3 Removal from Approved List.** A product will be removed from the Department's list if any of the following conditions occur:

**16.3.1** Testing or inspection of verification sample results in a failure to meet the specifications,

**16.3.2** Changes to the product without notification, or

**16.3.3** Performance of the product no longer meets intended purpose as determined by field evaluation.